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| 10/075,035      | 02/12/2002  | Z. Gerald Liu        | 4695-00009          | 7509             |

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| EXAMINER |
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TRAN, HIEN THI

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| ART UNIT | PAPER NUMBER |
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1764

DATE MAILED: 06/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/075,035

Applicant(s)

LIU ET AL.

Examiner

Hien Tran

Art Unit

1764

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 4/8/05.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-90 is/are pending in the application.
- 4a) Of the above claim(s) 19-90 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-90 are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 February 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 4/28/03 & 4/12/02.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election with traverse of group I, claims 1-18, in the reply filed on 4/8/05 is acknowledged. The traversal is on the ground(s) that the application may be most efficiently examined if all groups were searched and examined at one time. This is not found persuasive because examining of all groups will impose a serious burden on the examiner and since the search required for one group is not required for other groups as set forth in the previous office action.

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 19-90 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 4/8/05.

### ***Drawings***

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: "384, 386, 388" (Fig. 4). Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not

Art Unit: 1764

accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "210, 212, 332, 364" has been used to designate both channels (page 17, line 28-29) and sections (page 18, lines 26-27). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

5. The drawings have not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the drawings to comply with CFR 1.84(p)(5), e.g. they should include the reference sign(s) mentioned in the specification and vice versa.

### *Specification*

6. The disclosure is objected to because of the following informalities:

On page 1, line 5 --, now US Patent No. 6,669,913-- should be inserted after "2000"; in line 6 --, now US Patent No. 6,776,814-- should be inserted after "2001"; in line 29 -- 10/075,036-- should be inserted after "No."; in line 30 --, now abandon-- should be inserted after "4695-00010".

Art Unit: 1764

On page 9, line 29 --or corrugated pleats-- should be inserted before "110" for consistency (note page 6, lines 14-15).

On page 10, lines 8 and 24 --or inner central section-- should be inserted before "142" (note page 7, line 8); in line 25 --or outer annular section-- should be inserted before "148" (note page 7, line 18).

On page 11, line 6 --port-- should be inserted before "186" and "180" (note page 9, lines 14-15); in line 12 --or device-- should be inserted before "202" (note page 11, line 12); in line 18 --or sheets-- should be inserted before "214" (note page 11, line 17).

Appropriate correction is required.

7. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

#### ***Claim Objections***

8. Claim 2 is objected to because of the following informalities:

In claim 2, line 4 --sheet-- should be inserted after "media".

Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 112***

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claims 1-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Art Unit: 1764

In claim 1, line 3 "said exhaust" has no clear antecedent basis. see the remaining claims likewise.

Claim 18 is an improper dependent claim as it fails to further limit the subject matter of the previous claims. Apparently, claim 18 merely recites process limitation, e.g. "said exhaust" is not a part of the apparatus, and therefore the claim is not structurally further limiting.

***Claim Rejections - 35 USC § 102***

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

12. Claims 1-8, 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Nagai et al (5,863,311).

With respect to claim 1, Nagai et al discloses an exhaust aftertreatment combined filter and catalytic converter comprising:

a plurality of channels, each having both: a) a flow-through channel catalytically reacting with an exhaust; and b) a wall-flow channel trapping particulate (Figs. 3A, B, 14A, B).

With respect to claim 2, Nagai et al discloses that the exhaust aftertreatment combined filter and catalytic converter comprises a plurality of sheets, at least one of which comprises filter media sheet defining said channels (col. 7, lines 35-45; col. 10, lines 53-65, Figs. 3A, B, 14A, B).

With respect to claims 3, 7, note the overlapped channel sections in the flow channels in Figs. 3A, B, 14A, B in Nagai et al.

Art Unit: 1764

With respect to claims 4-5, 7-8, Nagai et al discloses that the channels have plurality of catalytically treated surfaces (see, for example, col. 4, lines 25-32, Fig. 11).

With respect to claim 6, Nagai et al discloses that the surfaces of the channels are treated with different catalysts (see, for example, col. 13, lines 23-31 and col. 14, lines 20-23).

With respect to claim 18, Nagai et al discloses that the exhaust is diesel engine exhaust.

Instant claims 1-8, 18 structurally read on the apparatus of Nagai et al.

### ***Double Patenting***

13. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

14. Claims 1-5, 7-18 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-19 of U.S. Patent No. 6,669,913. Although the conflicting claims are not identical, they are not patentably distinct from each other because they are directed to the same conceptual invention.

15. Claim 6 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-19 of U.S. Patent No. 6,669,913 in view of Nagai et al (5,863,311).

Art Unit: 1764

The apparatus of 1-19 of U.S. Patent No. 6,669,913 is substantially the same as that of the instant claims, but is silent as to whether the surfaces of the channels may be treated with different catalysts.

However, the same teachings with respect to Nagai et al apply.

It would have been obvious to one having ordinary skill in the art to substitute the catalysts of Nagai et al for the catalyst of claims 1-19 of U.S. Patent No. 6,669,913 for the known and expected results of obtaining the same result in the absence of unexpected results. Note that it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice.

*In re Leshin*, 125 USPQ 416.

### ***Conclusion***

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hien Tran whose telephone number is (571) 272-1454. The examiner can normally be reached on Tuesday-Friday from 7:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on (571) 272-1444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR



Art Unit: 1764

system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*Hien Tran*

HT  
June 13, 2005

**Hien Tran**  
**Primary Examiner**  
**Art Unit 1764**